

# **EXHIBIT 3**



Defendants propose the following claim constructions for the Asserted Claims of the Asserted Patents. Defendants also incorporate by reference all claim terms / limitations identified in their invalidity contentions as being indefinite under indefinite under 35 U.S.C. § 112 ¶ 2 (*see* Invalidity Contentions, Section IX.B as served on January 6, 2021), and as lacking enablement and written support under indefinite under 35 U.S.C. § 112 ¶ 1 (*see* Invalidity Contentions, Section IX.A as served on January 6, 2021).

Defendants expressly reserve the right to supplement, amend, or otherwise modify their list of terms in any way permitted by the Federal Rules of Civil Procedure and this Court's Local Rules and Patent Rules, or in response to Plaintiff WSOU's identification of terms and elements. Defendants provide this disclosure based upon information reasonably known and available to Defendants at this time. To the extent that WSOU shows good cause and is permitted to amend or supplement its infringement contentions in the future, or otherwise changes or further clarifies the positions it has taken in this case (including to add or to change in any way the claim(s) currently asserted, or to modify its apparent interpretation of the scope of the claim(s)), Defendants reserve the right to respond.

Means-Plus-Function Terms			
Asserted Claim	Claim Term	Preliminary Proposed Construction	Extrinsic Evidence Support
'505 Claim 14	"a data message receiver to receive data from a first terminal device"	Governed by 35 U.S.C. § 112(f)  Function: receiving data from a first terminal device  Indefinite under 35 U.S.C. § 112(b); specification fails to describe it Structure: none disclosed	None.
'505 Claim 14	"a formatter to format the received data into at least one SMS (Short Message Service) message"	Governed by 35 U.S.C. § 112(f)  Function: formatting the received data into at least one SMS (Short Message Service) message  Indefinite under 35 U.S.C. § 112(b); specification fails to describe it Structure: none disclosed	None.
'505 Claim 14	"a transmitter to transmit the at least one SMS message to the second, remotely located, terminal device through a cellular network connection"	Governed by 35 U.S.C. § 112(f)  Function: transmitting the at least one SMS message to the second, remotely located, terminal device through a cellular network connection  Indefinite under 35 U.S.C. § 112(b); specification fails to describe it Structure: none disclosed	None.
'534 Claim 1	" <u>transmitting user data between a transmitter and a receiver in a multi-carrier radio communication system</u> "	Governed by 35 U.S.C. § 112(f) functions underlined in claim language  Indefinite under 35 U.S.C. § 112(b)	None.

	<u>having a plurality of orthogonal frequency sub-carriers,”</u>	Structure for transmitter: a base station of an OFDMA system set forth in '534 specification, 5:33-35.  Structure for receiver is a terminal of an OFDMA system set forth in '534 specification, 5:53-55.	
'534 Claim 1	<u>“at the receiver, determining quality levels for said sub-carriers;”</u>	Governed by 35 U.S.C. § 112(f) functions underlined in claim language  Indefinite under 35 U.S.C. § 112(b) Structure for receiver is a terminal of an OFDMA system set forth in '534 specification, 5:53-55.	None.
'534 Claim 1	<u>“sending said quality levels from said receiver to said transmitter;”</u>	Governed by 35 U.S.C. § 112(f) functions underlined in claim language  Indefinite under 35 U.S.C. § 112(b) Structure for transmitter: a base station of an OFDMA system set forth in '534 specification, 5:33-35.  Structure for receiver is a terminal of an OFDMA system set forth in '534 specification, 5:53-55.	None.
'534 Claim 1	<u>“selecting, based on said quality levels, a set of sub-carriers on which said user data is to be transmitted between said transmitter and said receiver,”</u>	Governed by 35 U.S.C. § 112(f) functions underlined in claim language  Indefinite under 35 U.S.C. § 112(b) Structure for transmitter: a base station of an OFDMA system set forth in '534 specification, 5:33-35.  Structure for receiver is a terminal of an OFDMA system set forth in '534 specification, 5:53-55.	None.

'534 Claim 1	“from said transmitter, before transmission of said user data, <u>sending an indication related to a threshold, said indication and said quality levels enabling said receiver to deduce said set of sub-carriers on which said user data is to be transmitted;</u> ”	Governed by 35 U.S.C. § 112(f) functions underlined in claim language  Indefinite under 35 U.S.C. § 112(b) Structure for transmitter: a base station of an OFDMA system set forth in '534 specification, 5:33-35.	None.
'534 Claim 1	“at said receiver, <u>selecting said set of sub-carriers on which said user data is to be transmitted as a function of said indication and of said quality levels.</u> ”	Governed by 35 U.S.C. § 112(f) functions underlined in claim language  Indefinite under 35 U.S.C. § 112(b) Structure for receiver is a terminal of an OFDMA system set forth in '534 specification, 5:53-55.	None.
'534 Claim 6	“An apparatus to facilitate communication of user data in a multi-carrier radio communication system having a plurality of orthogonal frequency sub-carriers, the apparatus comprising”	Governed by 35 U.S.C. § 112(f)  Indefinite under 35 U.S.C. § 112(b); Structure: none disclosed	None.
'534 Claim 6	“means for selecting a set of sub-carriers from the plurality of sub-carriers on which user data is to be communicated from a transmitter to a receiver, said selecting based at least in part on at least one of sub-carrier quality levels and a threshold indication associated with sub-carriers, said quality levels communicated from the receiver to the transmitter and said threshold indication communicated from the transmitter to the receiver;”	Governed by 35 U.S.C. § 112(f)  Function: selecting a set of sub-carriers from the plurality of sub-carriers on which user data is to be communicated from a transmitter to a receiver  Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	None.

'534 Claim 6	“means for selecting said set of sub-carriers on which said user data is to be received from said transmitter”	<p>Governed by 35 U.S.C. § 112(f)</p> <p>Function: selecting the set of sub-carriers on which the user data is to be received from the transmitter</p> <p>Indefinite under 35 U.S.C. § 112(b)</p> <p>Structure: none disclosed</p>	None.
'534 Claim 6	“means for determining quality levels for sub-carriers”	<p>Governed by 35 U.S.C. § 112(f)</p> <p>Function: determining quality levels for sub-carriers</p> <p>Indefinite under 35 U.S.C. § 112(b)</p> <p>Structure: none disclosed</p>	None.
'534 Claim 6	“means for sending said quality levels to said transmitter”	<p>Governed by 35 U.S.C. § 112(f)</p> <p>Function: sending the quality levels to the transmitter</p> <p>Indefinite under 35 U.S.C. § 112(b)</p> <p>Structure: none disclosed</p>	None.
'534 Claim 6	“means for receiving and storing said threshold indication from said transmitter, said threshold indication and said quality levels enabling said receiver to deduce said set of sub-carriers on which said user data is to be received”	<p>Governed by 35 U.S.C. § 112(f)</p> <p>Function: receiving and storing the threshold indication from the transmitter, the threshold indication and the quality levels enabling the receiver to deduce the set of sub-carriers on which the user data is to be received</p> <p>Indefinite under 35 U.S.C. § 112(b)</p> <p>Structure: none disclosed</p>	None.
'534 Claim 11	“means for reading the threshold indication on at least one sub-carrier	Governed by 35 U.S.C. § 112(f)	None.

	of the selected set of sub-carriers after detecting a specific identifier associated with the receiver on said at least one sub-carrier”	Function: reading the threshold indication on at least one sub-carrier of the selected set of sub-carriers after detecting a specific identifier associated with the receiver on the at least one sub-carrier  Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	
’534 Claim 13	“means for selecting said set of sub-carriers on which said user data is to be transmitted to said receiver”	Governed by 35 U.S.C. § 112(f)  Function: selecting the set of sub-carriers on which the user data is to be transmitted to the receiver  Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	None.
’534 Claim 13	“means for receiving said quality levels from said receiver”	Governed by 35 U.S.C. § 112(f)  Function: receiving the quality levels from the receiver  Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	None.
’534 Claim 13	“means for sending said threshold indication to said receiver, said threshold indication and said quality levels enabling said receiver to deduce the set of sub-carriers on which said user data is to be transmitted”	Governed by 35 U.S.C. § 112(f)  Function: sending the threshold indication to the receiver,  Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	None.
’232 Claim 14	“instructions for receiving, by a controller of the traffic flow control system, a backpressure signal, wherein the back pressure signal indicates a period of congestion”	Governed by 35 U.S.C. § 112(f)  Function: receiving, by a controller of the traffic flow control system, a backpressure signal, wherein	None.



		<p>the back pressure signal indicates a period of congestion</p> <p>Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed</p>	
'232 Claim 14	“instructions for determining, by the controller of the traffic flow control system, at least one weighting factor to be applied to the flow of data packets based on the received backpressure signal”	<p>Governed by 35 U.S.C. § 112(f)</p> <p>Function: determining, by the controller of the traffic flow control system, at least one weighting factor to be applied to the flow of data packets based on the received backpressure signal</p> <p>Indefinite under 35 U.S.C. § 112(b); Structure: none disclosed</p>	None.
'232 Claim 14	“instructions for adjusting an amount of rate limiting applied to at least a portion of the flow of data packets based on both the determined at least one weighting factor and a content of the backpressure”	<p>Governed by 35 U.S.C. § 112(f)</p> <p>Function: adjusting an amount of rate limiting applied to at least a portion of the flow of data packets based on both the determined at least one weighting factor and a content of the backpressure</p> <p>Indefinite under 35 U.S.C. § 112(b); Structure: none disclosed</p>	None.
'232 Claim 14	“instructions for execution by a traffic flow control system for performing flow control on a flow of data packets for transmission over a link”	<p>Governed by 35 U.S.C. § 112(f)</p> <p>Function: execution by a traffic flow control system for performing flow control on a flow of data packets for transmission over a link</p> <p>Indefinite under 35 U.S.C. § 112(b); Structure: none disclosed</p>	None.

'232 Claim 1	"A method performed by a traffic flow control system for performing flow control on a flow of data packets for transmission over a link, the method comprising"	<p>Governed by 35 U.S.C. § 112(f)</p> <p>Function: performing flow control on a flow of data packets for transmission over a link</p> <p>Structure: a plurality of ingress buffers, plurality of rate limiters, a multiplexer, and a controller, as set forth in specification at 1:56-63</p>	None.
'036 Claims 1, 12	"method for controlling data flow in a network"	<p>Governed by 35 U.S.C. § 112(f)</p> <p>Function: controlling data flow in a network</p> <p>Structure: a device as set forth in the specification at 1:56-63.</p>	None.
'036 Claims 23, 24	"apparatus configured for controlling data flow in a network"	<p>Governed by 35 U.S.C. § 112(f)</p> <p>Function: controlling data flow in a network</p> <p>Structure: a computing device comprising at least one central processing unit (CPU) connected to support circuits and memory as set forth in the specification at 6:6-12.</p>	None.
'036 Claims 1, 12, 23, 24	"congestion condition to enable thereby the control of at least one data flow in a manner tending to reduce the congestion condition"	<p>Governed by 35 U.S.C. § 112(f)</p> <p>Function: enable thereby the control of at least one data flow in a manner tending to reduce the congestion condition</p> <p>Indefinite under 35 U.S.C. § 112(b)</p>	None.

		Lacks Written description under 35 U.S.C. § 112(a); Structure: none disclosed	
'240 Claims 1, 6	“connectivity verification server to perform unattended connectivity verification jobs”	Governed by 35 U.S.C. § 112(f)  Function: perform unattended connectivity verification jobs  Indefinite under 35 U.S.C. § 112(b)  Alternative structure: Managed Object Server as set forth in the specification at 7:49-58.	None.
'839 Claim 1	“method, in an access device of the communication network, for managing route information”	Governed by 35 U.S.C. § 112(f)  Function: managing route information  Structure: device as set forth in the specification at 3:22-27.	None.
'839 Claim 6	“route management apparatus, in an access device of the communication network, for managing route information”	Governed by 35 U.S.C. § 112(f)  Function: managing route information  Structure: apparatus comprising a receiving means, a first obtaining means and a route maintenance means as set forth in the specification at 3:28-38.	None.
'839 Claim 6	“a receiver configured to receive an access response message from a server”	Governed by 35 U.S.C. § 112(f)  Function: receive an access response message from a server	None.

		Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	
'839 Claim 6	“a first obtainer configured to obtain route-related information and a predefined using time from said access response message, said predefined using time indicating the using time of said route”	Governed by 35 U.S.C. § 112(f)  Function: obtain route-related information and a predefined using time from said access response message, said predefined using time indicating the using time of said route  Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	None.
'839 Claim 6	“a route maintainer configured to update a route table based on said route-related information and said predefined using time”	Governed by 35 U.S.C. § 112(f)  Function: update a route table based on said route-related information and said predefined using time  Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	None.
'839 Claim 8	“a first judger configured to judge whether the route table item corresponding to said route-related information exists in said route table”	Governed by 35 U.S.C. § 112(f)  Function: judge whether the route table item corresponding to said route-related information exists in said route table  Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	None.
'839 Claim 8	“a second judger configured to judge whether a remaining time of said route table item is shorter than said predefined using time if the first judger judges that the route table item corresponding to said route-related information exists in said route table”	Governed by 35 U.S.C. § 112(f)  Function: judge whether a remaining time of said route table item is shorter than said predefined using time if the first judger judges that the route table item corresponding to said route-related information exists in said route table	None.

		Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	
'839 Claim 8	“an updater configured to update the remaining time of said route table item to said predefined using time if the first judger judges that the route table item corresponding to said route-related information exists in said route table and the second judger judges that the remaining time of said route table item is shorter than said predefined using time”	Governed by 35 U.S.C. § 112(f)  Function: update the remaining time of said route table item to said predefined using time if the first judger judges that the route table item corresponding to said route-related information exists in said route table and the second judger judges that the remaining time of said route table item is shorter than said predefined using time  Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	None.
'839 Claim 8	“a creator configured to create the route table item corresponding to said route-related information if the first judger judges that no route table item corresponding to said route-related information exists in said route table”	Governed by 35 U.S.C. § 112(f)  Function: create the route table item corresponding to said route-related information if the first judger judges that no route table item corresponding to said route-related information exists in said route table  Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	None.
'839 Claim 9	“a second obtainer configured to obtain correlated information of said route table item and a virtual local area network”	Governed by 35 U.S.C. § 112(f)  Function: obtain correlated information of said route table item and a virtual local area network  Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	None.
'905 Claim 6	“ <u>receiving</u> , from a first wireless communication apparatus in a second	Governed by 35 U.S.C. § 112(f) functions underlined in claim language	None.

	communication apparatus, <u>a reservation request message instructing the second wireless communication apparatus to reserve at least one additional frequency band for the first wireless communication apparatus during a transmission period of the first wireless communication apparatus</u> , the at least one additional frequency band being requested for use by the first wireless communication apparatus while transmitting data on a first frequency band, wherein the transmission period is a transmission opportunity for a wireless local area network;”	Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	
’905 Claim 6	“ <u>monitoring for availability of the at least one additional frequency band during the transmission period of the first wireless communication apparatus</u> ”	Governed by 35 U.S.C. § 112(f) functions underlined in claim language  Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	None.
’905 Claim 6	“in response to detection of availability of the at least one additional frequency band during the transmission period of the first wireless communication apparatus, <u>causing transmission of a reservation response message to the first wireless communication apparatus</u> , wherein the reservation response message	Governed by 35 U.S.C. § 112(f) functions underlined in claim language  Indefinite under 35 U.S.C. § 112(b) Structure: none disclosed	None.

	indicates that said at least one additional frequency band is available for the first wireless communication apparatus to use in transmission during the transmission period of the first wireless communication apparatus to enable the first wireless communication apparatus to increase the bandwidth of transmission to comprise the first frequency band and the at least one additional frequency band so that the first wireless communication apparatus transmits data during the transmission period on a transmission band having increased bandwidth greater than that of the first frequency band.”		
'071 Claim 1	“a processor for providing image data signalling to a projector, the image data signalling representing an image to be projected by the projector”	<p>Governed by 35 U.S.C. § 112(f)</p> <p>Function: providing image data signalling to a projector, the image data signalling representing an image to be projected by the projector</p> <p>Structure: an integrated circuit chip customized for a particular use as set forth in the specification at 4:37-39.</p>	None.
'071 Claim 14	“computer program code configured to, when executed by one or more processors, cause an apparatus to perform at least: receiving movement signalling associated with movement of a projector; and providing image	<p>Governed by 35 U.S.C. § 112(f)</p> <p>Function: executing computer program code configured to cause an apparatus to perform (1) receiving movement signalling associated with movement of a projector; and (2) providing image</p>	None.

	data signalling to the projector based on received movement signalling, wherein the movement signalling provides an indication of one or more movement criterion of the projector, the movement criterion representing one or more of displacement and movement speed of the projector, and wherein the processor is configured to discriminate a movement criterion and to provide associated image data signalling to project associated image data.”	data signalling to the projector based on received movement signalling, wherein the movement signalling provides an indication of one or more movement criterion of the projector, the movement criterion representing one or more of displacement and movement speed of the projector, and wherein the processor is configured to discriminate a movement criterion and to provide associated image data signalling to project associated image data  Indefinite under 35 U.S.C. § 112(b) Structure: None disclosed	
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Other Terms			
Asserted Claim	Claim Term	Preliminary Proposed Construction	Extrinsic Evidence Support
'505 Claim 1	“data synchronization”	Bringing a data file of a source device and a data file of a target device to the same value.	Wiley-IEEE Hargrave’s communications dictionary
'505 Claims 1, 14, 23	“remotely located”	A device that is unable to connect via local area network to a host device.	Wiley-IEEE Hargrave’s communications dictionary
'505 Claims 1, 14, 23	“[first/second/intermediate] terminal device”	A device with limited computing power.	Wiley-IEEE Hargrave’s communications dictionary
'505 Claims 1, 23	“formatting”	Indefinite under 35 U.S.C. § 112(b)	Wiley-IEEE Electrical and



		Lack of Written description under 35 U.S.C. § 112(a)	Electronics Engineering Dictionary
'505 Claim 14	"formatter to format"	Indefinite under 35 U.S.C. § 112(b) Lack of Written description under 35 U.S.C. § 112(a)	
'505 Claim 14	"transmitter to transmit"	Indefinite under 35 U.S.C. § 112(b) Lack of Written description under 35 U.S.C. § 112(a)	
'505 Claim 14	"data message receiver"	Indefinite under 35 U.S.C. § 112(b) Lack of Written description under 35 U.S.C. § 112(a)	
'505 Claims 1, 14, 23	"SMS (Short Message Service)"	Cellular based messages of limited size consisting of text and numbers.	Wiley-IEEE Hargrave's communications dictionary (with minor modification)
'505 Claims 1, 14, 23	"remotely located terminal device"	A device that is unable to connect via local area network to a host device.	Wiley-IEEE Electrical and Electronics Engineering Dictionary (with minor modification)
'505 Claims 3, 14, 23	"mobile terminal device"	A device that is unable to connect via local area network to a host device.	Wiley-IEEE Hargrave's communications dictionary
'505 Claims 1, 14, 23	"cellular network connection"	A device that is unable to connect via local area network to a host device.	Wiley-IEEE Electrical and Electronics Engineering Dictionary

'505 Claims 1, 23	"short-range connection"	A connection between terminal devices using infrared or Bluetooth connection	
'505 Claims 11, 14, 23	"short range communication link"	Communication link between terminal devices using infrared or Bluetooth connection	
'534 Claims 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 16, 17, and 18	"carrier"	A continuous frequency analog signal to be modulated and transferred over a communication channel.	Wiley-IEEE Electrical and Electronics Engineering Dictionary  Wiley-IEEE Hargrave's communications dictionary
'534 Claims 1, 6, 16	"orthogonal frequency sub-carriers"	A multi-carrier network system in which the frequency separation between the sub-carriers is chosen so that the sub-carriers are orthogonal to one another (i.e. the data transmitted on one sub-carrier is not causing interference on the data sent on the other sub-carriers).	
'534 Claims 4, 7	"maximal number of sub-carriers"	Indefinite under 35 U.S.C. § 112(b)	
'534 Claims 1, 2, 16	"as a function of said indication and of said quality levels"	Arranging the sub-carriers in quality level decreasing order and to select the sub-carriers starting with the sub-carrier having the highest quality level and continuing to select the sub-carriers with decreasing quality level until the indication related to a threshold is reached.	
'534 Claims 1, 6, 13, 15, 16, and 17	"transmitter"	A base station of an OFDMA system.	

'534 Claims 1, 6, 13, 15, 16, and 17	"receiver"	A terminal of an OFDMA system.	
'534 Claim 5	"calculated at said receiver"	Determining at a terminal a quality level for the sub-carriers of a multi carrier system.	
'534 Claim 6	"radio link"	A link without connecting wires	Wiley Electrical and Electronics Engineering Dictionary
'534 Claim 8	"signal-to-interference ratio"	The ratio of the magnitude of a given parameter of the desired signal, to that of the same parameter for any interference present.	Wiley Electrical and Electronics Engineering Dictionary
'534 Claim 8	"bit error rate"	Proportion of erroneously transmitted or received bits.	Wiley Electrical and Electronics Engineering Dictionary
'534 Claims 1, 2, 3, 5, 6, 7, 8, 9, 13, 16, and 17	"quality level"	One of a signal-to-interference ratio, a bit error rate, or a modulation scheme.	
'929 Claims 1, 3, 8, 10, and 15	"handoff" / "determining if a handoff is desired"	Connection to mobile device is handed-over from base station to another base station without breaking the connection.	Wiley-IEEE Hargrave's communications dictionary
'929 Claims 1, 6, and 11	"serving base station"	A base station currently serving a mobile station.	
'929 Claims 1, 2, 3, 4, 6, 9, 11, and 13	"target base station"	A base station to which a handoff of a mobile station to be performed.	
'929 Claims 1, 2, 3, 4, 6, 9, 11, and 13	"link" / "establishing a new link" / "existing link" / "initiating a new link" / "releasing the existing link"	A communication link between a base station and a mobile station, the communication link including one or more communication channels.	

'929 Claim 1	"achieving uplink synchronization"	Matching a mobile station's clock and data timing to the same clock and data timing of a base station.	Wiley-IEEE Hargrave's communications dictionary (with minor modification)
'929 Claim 1	"processed the transmitted active set update message"	Updating the active set to replace an existing communication link with a new communication link.	
'929 Claim 8	"measurement reports"	Values reported from a mobile station that contain information about channel quality. Measurement reports assist the network in making handover and power control decisions.	<a href="#">E1968A, E6701H, E6704A GSM/GPRS/EGPRS User's Guide (keysight.com)</a>
'929 Claim 11	"buffering bearer traffic"	During a handoff process, all data from the mobile station is buffered at the mobile station or all data at the network side is buffered at the network side until the handoff process is complete.	
'929 Claim 14	"characteristic"	Indefinite under 35 U.S.C. § 112(b)	
'929 Claim 14	"replacement hysteresis"	Indefinite under 35 U.S.C. § 112(b)	<a href="#">Optimal Timer Settings For The Soft Handover Algorithm in WCDMA   Request PDF (researchgate.net)</a>  3GPP, ETSI TR 125 922 v3.2.0 (2000-06)

'232 Claims 1, 14	"flow control"	Regulate movement of a series of data packets	Wiley Electrical and Electronics Engineering Dictionary
'232 Claims 1, 14	"flow of data packets"	Movement of a series of data packets	Wiley Electrical and Electronics Engineering Dictionary
'232 Claims 1, 14	"transmission over a link"	Indefinite under § 112(b)	
'232 Claims 1, 14	"backpressure signal"	Lacks written description under 35 U.S.C. § 112(a)	
'232 Claims 1, 14	"period of congestion"	Lack of written description under 35 U.S.C. § 112(a)	
'232 Claims 1, 14	"weighting factor"	An assignment of an amount of rate limiting between halting traffic and no rate limiting	
'232 Claims 1, 14	"indicates"	Indefinite under 35 U.S.C. § 112(b).	
'232 Claims 1, 14	"the traffic flow control system"	Indefinite under 35 U.S.C. § 112(b).	
'232 Claim 14	"a non-transitory machine-readable storage medium"	Lack of written description under 35 U.S.C. § 112(a)	
'232 Claims 1, 14	"rate limiting"	Lack of written description under 35 U.S.C. § 112(a).	Wiley Electrical and Electronics Engineering Dictionary
'232 Claims 1, 14	"content of the backpressure signal"	Lack of written description under 35 U.S.C. § 112(a)	
'036 Claims 1, 6-10, 12, 17-21, 23, 24	"data flow" / "to enable thereby the control of at least one data flow" /	Indefinite under 35 U.S.C. § 112(b)	

	“data flow is controlled” / “a data flow” / “the data flow”		
'036 Claims 1, 3, 12, 14, 23, 24	“network” / “network node in the network” / “network node” / “one or more network nodes upstream of the congestion condition”	Indefinite under 35 U.S.C. § 112(b).	
'036 Claims 1, 12, 23, 24	“congestion condition” / “indication that a congestion condition exists”	Indefinite under 35 U.S.C. § 112(b).	
'036 Claims 1, 12, 23, 24	“in a manner tending to reduce the congestion condition” / “the congestion may be reduced”	Indefinite under 35 U.S.C. § 112(b)	
'036 Claims 1, 12, 23, 24	“queue” / “queue maximum occupancy is exceeded” / “queue maximum occupancy”	Indefinite under 35 U.S.C. § 112(b), and/or lacks written description under 112(a).	
'036 Claims 4, 15	“queue data drop rate”	Indefinite under 35 U.S.C. § 112(b), and/or lacks written description under 112(a).	
'036 Claims 3, 14	“output link capability”	Indefinite under 35 U.S.C. § 112(b).	
'036 Claims 1, 5, 6-9, 12, 16, 18-20, 23, 24	“data drop” / “data dropped” / “an amount of data dropped” / “a number of data drops over time” / “dropping”	“abandon packets” / “abandoned packets” / “an amount of packets abandoned” / “a number of packets abandoned over time” / “abandoning”	Meriam-Webster, see “drop/dropped;”
'036 Claims 7, 8, 9, 18, 19, 20	“those packets associated with the destination address” / “those packets associated with only the destination address” / “those packets associated with the source and destination addresses”	Indefinite under 35 U.S.C. § 112(b)	

'036 Claims 9, 20	"the source address end-node being unknown"	Indefinite under 35 U.S.C. § 112(b)	
'036 Claims 1, 12, 23, 24	"end-node associated with the congestion condition"	Written description/enablement under 35 U.S.C. § 112(a)	
'036 Claims 11, 22	"an indication of an inability to drop packets"	Indefinite under 35 U.S.C. § 112(b) and /or Written description/enablement under 35 U.S.C. § 112(a)	
'036 Claims 12, 17, 24	"the MAC address pair" / "the MAC address"	Indefinite under 35 U.S.C. § 112(b)	
'036 Claims 10, 11, 21, 22	"in accordance with a Service Level Agreement" / "a Service Level Agreement"	Indefinite under 35 U.S.C. § 112(b)	
'240 Claims 1, 6, 13	"unattended connectivity verification jobs"	Indefinite under 35 U.S.C. § 112(b)	
'240 Claims 1, 6, 13	"verifying connectivity in the network relating to at least Layer-2 and Layer-3 objects"	Indefinite under 35 U.S.C. § 112(b)	
'240 Claims 1, 6, 13	"a given containment hierarchy"	Indefinite under 35 U.S.C. § 112(b)	
'240 Claims 1, 6	"the performing generates"	Indefinite under 35 U.S.C. § 112(b)	
'240 Claims 1, 6, 13	"the comparison shows that at least one of the connectivity verification results has reached the specified connectivity verification threshold"	Lack of written description under 35 U.S.C. § 112(a)	

'240 Claims 1, 6, 13	"the containment hierarchy affected by the connectivity verification result"	Lack of written description/enablement under 35 U.S.C. § 112(a)	
'240 Claim 4	"alarm information"	Lack of written description/enablement under 35 U.S.C. § 112(a)	
'240 Claim 7	"a pair of source and destination IP objects"	one pre-specified source IP managed entity object and one pre-specified destination IP managed entity object	
'240 Claims 1, 4, 6, 13, 15	"display" / "displaying"	Visually presenting data	
'240 Claim 16	"the displayed object is one of an OSI Layer 2 and an OSI Layer 3 object"	The displayed object is of both an OSI Layer 2 object and an OSI Layer 3 object	
'240 Claim 16	"OSI Layer 3 object"	Network layer device including routers and switches	Wiley Electrical and Electronics Engineering Dictionary
'240 Claim 16	"OSI Layer 2"	Data link layer	Wiley Electrical and Electronics Engineering Dictionary
'240 Claims 1, 6, 13	"connectivity verification threshold"	Condition resulting from connectivity verification jobs assessing adherence to corresponding service level agreements	
'240 Claims 1, 6, 13	"Layer-2 objects"	Data link layer Media Access Control device	Wiley Electrical and Electronics Engineering Dictionary
'240 Claims 1, 6, 13	"Layer-3 objects"	Network layer router	Wiley Electrical and Electronics



			Engineering Dictionary
'240 Claims 1, 6, 13	"define a connectivity verification job" / "defining a connectivity verification job"	Specifying connectivity verification parameters including the type and the number of connectivity verification tests to be performed	
'240 Claim 10	"specifying a threshold for at least one round of trip delay, jitter, and packet loss"	Lack of written description / enablement under 35 U.S.C. § 112(a)	
'240 Claims 11, 18	"ping commands"	Directive to send a packet to the desired address and await a response to determine whether an IP address is connected	Wiley Electrical and Electronics Engineering Dictionary
'240 Claims 1, 6, 13	"the connectivity verification result[s] associated with the alarm"	Indefinite under 35 U.S.C. § 112(b)	
'240 Claim 4	"selected connectivity verification results"	Indefinite under 35 U.S.C. § 112(b);  Lack of written description / enablement under 35 U.S.C. § 112(a)	
'240 Claims 1, 6, 10, 13	"user-input specification"	Lack of written description / enablement under 35 U.S.C. § 112(a)	
'240 Claim 5	"connectivity profile" / "a deviation from the connectivity profile" / "the results of each connectivity verification job are compared against a connectivity profile"	Indefinite under 35 U.S.C. § 112(b); enablement under 35 U.S.C. § 112(a).	
'839 Claims 1, 6, 11	"the communication network"	Indefinite under 35 U.S.C. § 112(b)	

'839 Claims 2, 4, 7, 9, 11, 12	"said access device"	Indefinite under 35 U.S.C. § 112(b)	
'839 Claims 1, 3, 6, 8, 11	"route" / "route-related information"	Indefinite under 35 U.S.C. § 112(b).	
'839 Claims 1, 6, 11	"using time"	Claim 6: Indefinite for lack of antecedent basis under 35 U.S.C. § 112(b).  "lease time"	
'839 Claims 4, 9	"said virtual local area network configuration is employed between said access device and each marginal routers connected with said access device"	Indefinite under 35 U.S.C. § 112(b).	
'839 Claims 4, 9	"said virtual local area network configuration"	Indefinite under 35 U.S.C. § 112(b).	
'839 Claims 5, 10	"said access response message refers to a dynamic host configuration protocol message" / "said access response message refers to a dynamic host configuration protocol"	Indefinite under 35 U.S.C. § 112(b).	
'839 Claim 10	"said dynamic host configuration protocol response message"	Indefinite under 35 U.S.C. § 112(b).	
'839 Claim 8	"a first judge" / "a second judge"	Indefinite under 35 U.S.C. § 112(b).	
'839 Claim 12	"a digital subscriber line-access multiplexer"	Lack of written description / enablement under 35 U.S.C. § 112(a)	

'839 Claims 4, 9	"marginal router" / "marginal routers"	Indefinite under 35 U.S.C. § 112(b).	
'839 Claims 3, 8, 9	"a route table item" / "said route table item"	Indefinite under 35 U.S.C. § 112(b)	
'839 Claim 4	"an access response message"	Indefinite under 35 U.S.C. § 112(b)	
'839 Claims 5, 10	"the least time"	Indefinite under 35 U.S.C. § 112(b).	
'839 Claims 1, 6	"said predefined using time indicates[ing] a [the] using time of said route"	Indefinite under 35 U.S.C. § 112(b).	
'060 Claims 1 and 10	"frequency domain component feature of the feature vector"	A group of a plurality of energy levels of the audio signal, wherein each of the plurality energy levels corresponds to the energy of an overlapping band of the audio signal; a value representing a centroid of the frequency domain spectrum of the audio signal; and a value representing the degree of flatness of the frequency domain spectrum.	
'060 Claims 1 and 10	"extracting a feature vector"	Indefinite under 35 U.S.C. § 112(b)	
'060 Claims 1 and 10	"time domain component feature of the feature vector"	A gradient index based on the sum of the gradient at points in the audio signal which result in a change in direction of the waveform of the audio signal; a ratio of the energy of a frame of the audio signal to the energy of a previous frame of the audio signal; and a voice activity detector indicating whether a frame of the audio signal is classified as active or inactive.	
'060 Claims 1 and 10	"the level value is attenuated"	Indefinite under 35 U.S.C. § 112(b)	

'060 Claims 1 and 10	"approaches an estimate"	Indefinite under 35 U.S.C. § 112(b)	
'060 Claims 1 and 10	"spectral shape parameter"	A sub band energy level value or a sub band gain factor based on the sub band energy level value.	
'905 Claims 1, 6, 12, 18, 25, and 26	"transmission opportunity"	The interval of time when a particular station is permitted to initiate transmissions onto the wireless medium.	IEEE Std 802.11-2016 (Revision of IEEE Std 802.11-2012)  Wireless Communication Standards: A Study of IEEE 802.11, 802.15, 802.16, p.356. Publisher: Wiley-IEEE Standards Association
'905 Claims 1, 6, 12, 18, 25, and 26	"transmission period"	The period of the transmission opportunity.	
'905 Claims 1, 12, 25	"determined transmission time interval"	The interval of the transmission opportunity.	
'905 Claims 5, 15	"during a time interval between data transmission intervals during the transmission period"	Indefinite under 35 U.S.C. § 112(b)	
'905 Claims 1, 12, 25	"determining to utilize a bandwidth greater than that of the first frequency band during the transmission period"	Indefinite under 35 U.S.C. § 112(b)	

'905 Claims 5, 16	"at least one frequency channel indicator"	Indefinite under 35 U.S.C. § 112(b)	
'905 Claims 6, 18, 26	"at least one additional frequency band"	At least one frequency band other than the frequency band that is already acquired by the first wireless communication apparatus.	
'905 Claims 6, 18, 26	"monitoring for availability"	Channel sounding on the least one frequency band to detect an available frequency band.	
'905 Claims 7, 19	"triggering a network allocation vector setting"	Triggering the network allocation vector protection for the reserved frequency band for a determined period of time after the transmission of the reservation message.	
'905 Claims 8 and 20	"clear-to-send message"	A signal sent in response to a request-to-send signal, indicating its readiness to receive a transmission	Wiley-IEEE Electrical and Electronics Engineering Dictionary
'905 Claims 9, 21	"causing the transmission of the reservation message on each frequency band separately"	Indefinite under 35 U.S.C. § 112(b)	
'905 Claims 11, 23	"timing and transmission frequency"	Indefinite under 35 U.S.C. § 112(b)	
'905 Claims 17, 24	"radio medium"	Indefinite under 35 U.S.C. § 112(b)	
'960 Claims 1, 2, 3, 9, 10, 15, 16, 17, 23, and 24	"virtual reference"	A group of pixels used as reference material for encoding portions of the video signal, but that does not comprise or represent any portion of the actual video sequence to be displayed.	
'960 Claims 1, 9, 15, 23	"an original video signal"	A video signal that includes a sequence of video frames and is to be encoded.	

'960 Claims 1, 9, 15, 23	"video frames"	A sequence of frames.	Wiley-IEEE Electrical and Electronics Engineering Dictionary
'960 Claims 1, 9, 15, 23	"subsequent video display"	Generating an encoded video signal from an original video signal, the encoded video signal for use in subsequent video display of the original video signal.	
'960 Claims 1, 9, 15, 23	"does not represent any portion of any individual frame of the original video signal"	Data generated based on a portion of a video signal but not to be displayed with the video signal.	
'960 Claims 1, 15	"incorporating" / "incorporating said encoded virtual reference data" / "incorporating into the encoded video signal an indication" / "incorporating said encoded portions of said original video signal"	Forming an encoded dual block by including a block of encoded original video signal and a block of encoded virtual reference data	
'960 Claims 3, 17	"minimize differences"	Indefinite under 35 U.S.C. § 112(b)	
'071 Claims 1, 9, 13, 14	"movement signalling" / "receiv[ing] movement signalling associated with the movement of the projector" / "corresponding movement signalling"	Indefinite under 35 U.S.C. § 112(b)	
'071 Claim 9	"a movement sensor configured to detect movement of the apparatus and/or a projector"	Indefinite under 35 U.S.C. § 112(b)	
'071 Claims 1, 13, 14	"discriminate" / "discriminate a movement criterion" / "the processor"	Indefinite under 35 U.S.C. § 112(b)	

	is configured to discriminate a movement criterion”		
'071 Claims 1, 13, 14	“provide associated image data signalling to project associated image data”	Indefinite under 35 U.S.C. § 112(b)	
'071 Claims 1, 9, 13, 14	“the processor” / “wherein the processor is configured”	Indefinite under 35 U.S.C. § 112(b)	

DATED: February 19, 2021

Respectfully submitted,

/s/Lionel M. Lavenue

Lionel M. Lavenue

Virginia Bar No. 49,005

lionel.lavenue@finnegan.com

**FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, LLP**

1875 Explorer Street, Suite 800

Reston, VA 20190

Phone: (571) 203-2700

Fax: (202) 408-4400

**ATTORNEY FOR DEFENDANTS**

#### **CERTIFICATE OF SERVICE**

I hereby certify that all counsel of record, who are deemed to have consented to electronic service, are being served on February 19, 2021 with a copy of this document via email.

/s/Lionel M. Lavenue

Lionel M. Lavenue